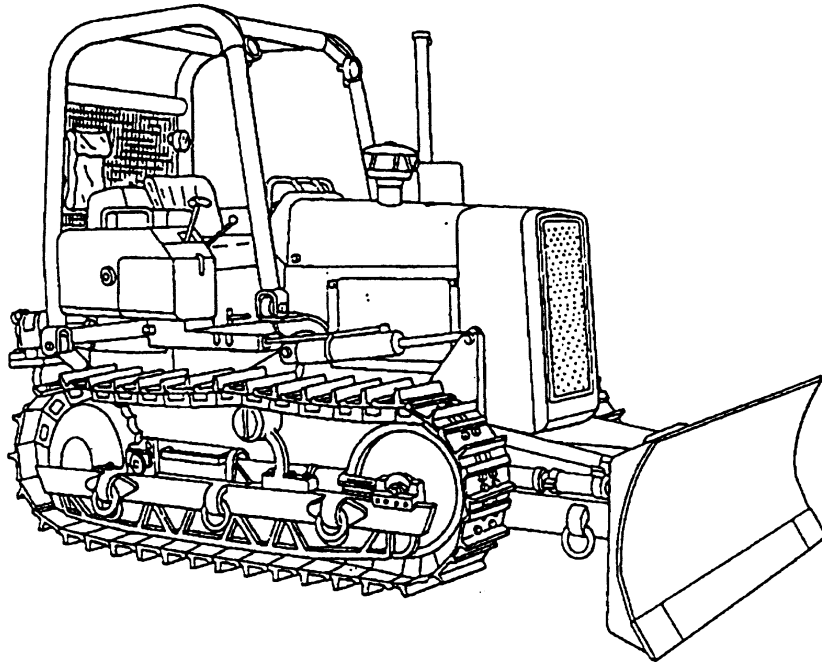# CAT D5

SYSTEM IDENTIFIERS	
NOMENCLATURE:	Tractor, Fully Tracked, Low Speed, Diesel, Light
SSN:	------
LIN:	W76268
NSN:	2410-01-127-6512
AMIM NO:	------
EIC:	EBB
FUEL TYPE:	DIESEL

SYSTEM DESCRIPTION
The CAT D5 is a fully-tracked, low speed bulldozer. It is powered by a Caterpillar 3306, six-cylinder diesel engine. The power shift transmission has three forward and three reverse gears. The CAT D5 weighs 17 tons as equipped with a winch and the Roll Over Protection Structure (ROPS).

There are no separately authorized components identified with this weapon/materiel system.

CAT D5

LIN	**NSN**	**NOMENCLATURE**

SYSTEM VARIANTS

| **MDS**	**LIN**	**NSN**
CAT D5	W76268	2410-01-270-1192
CAT D5	W76285	2410-01-296-8479

This summary provides an overview of FY 94 Total Army operating and support costs and other information for the weapon system. Average cost per system is displayed so the data can be used in performing analyses and cost studies. Average costs are calculated using the end item's density. NET REPARABLES represent the cost with the Major Subordinate Command (MSC) specific credit rates applied (detailed in Section 1 - Overview).

CAT D5
FY 94 TOTAL ARMY COST SUMMARY
(FY 94 Constant Dollars)

DENSITY		DEPOT END ITEM MAINTENANCE (5.061)	
		TOTAL	$0
NUMBER OF SYSTEMS	46	QUANTITY COMPLETED	0
		AVG COST/END ITEM	$0.00

CLASS III-POL (5.05)	DEPOT SECONDARY ITEM MAINTENANCE	
	TOTAL	$0
NOT AVAILABLE	QUANTITY COMPLETED	0
	AVG COST/SECONDARY ITEM	$0.00

CLASS V-AMMUNITION (2.11)

NOT APPLICABLE

INTERMEDIATE MAINTENANCE

	DS/GS	CIVILIAN
MIL/CIV LABOR COST	$3,538	$36,655
AVG COST/SYSTEM	$76.91	$796.85
MAINTENANCE MANHOURS	213	2,020
MMHs/SYSTEM	4.63	43.91

CLASS IX MATERIEL-PARTS (5.04/5.03)

	FY 94 DOLLARS	AVG COST PER SYSTEM
CONSUMABLES	$85,570	$1,860.22
NET REPARABLES	$0	$0.00
NET TOTAL COSTS	$85,570	$1,860.22

The following graph and table display FY 94 Class IX costs for consumables (CONS), reparables, (REPS), and net reparables (NET REPS) by MACOM. CONS and REPS are the total costs of requisitions recorded in the Logistic Intelligence File (LIF). NET REPS are the cost to the customer in the field and are calculated by applying an MSC-specific credit rate at the NSN level. TOTAL ARMY (TA) costs are the summation of costs across all MACOMs in the table. NET TOTAL COSTS are the sums of the costs of CONS and NET REPS. NUMBER OF SYSTEMS is the density recorded in the Continuing Balance System - Expanded (CBS-X). AVG PER SYSTEM costs are calculated by dividing the costs in NET TOTAL COSTS by the number of systems for each MACOM.

CAT D5
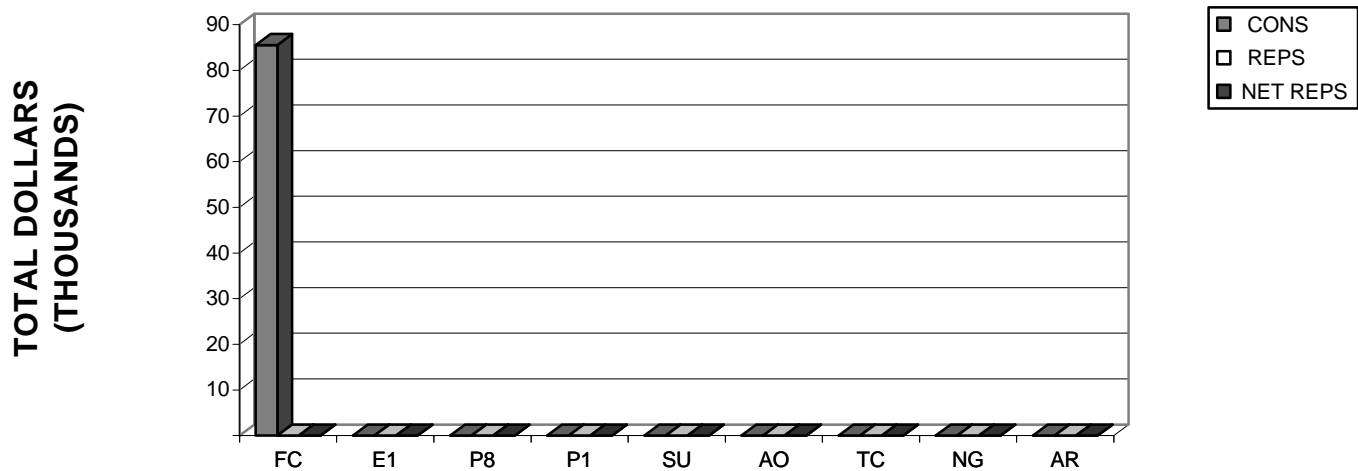
CAT D5 FY 94 MACOM CLASS IX COSTS							
MACOM		CONS	REPS	NET REPS	NET TOTAL COSTS	NUMBER OF SYSTEMS	AVG PER SYSTEM
CODE	NAME						
FC	FORSCOM	85,570	0	0	85,570	46	1,860
E1	USAREUR	0	0	0	0	0	0
P8	EUSA	0	0	0	0	0	0
P1	USARPAC	0	0	0	0	0	0
SU	USARSO	0	0	0	0	0	0
AO	USASOC	0	0	0	0	0	0
TC	TRADOC	0	0	0	0	0	0
NG	ARNG	0	0	0	0	0	0
AR	USAR	0	0	0	0	0	0
TA	TOTAL ARMY	85,570	0	0	85,570	46	1,860

The following graph and table display FY 90-94 Class IX costs for consumables (CONS), reparables (REPS) and net reparables (NET REPS) by Total Army. The Total Army costs are a summation of all the MACOMs displayed on the previous page. CONS and REPS are the total cost of requisitions recorded in the Logistic intelligence File (LIF). NET REPS are the cost to the customer in the field and are calculated by applying an MSC-specific credit rate at the NSN level. NET TOTAL COSTS are the sums of the costs of CONS and NET REPS. NUMBER OF SYSTEMS is the density recorded in the Continuing Balance System - Expanded (CBS-X). AVG PER SYSTEM costs are calculated by dividing the costs in NET TOTAL COSTS by the number of systems in the Total Army for the fiscal year. Blank rows indicate system was not tracked in the OSMIS database during that
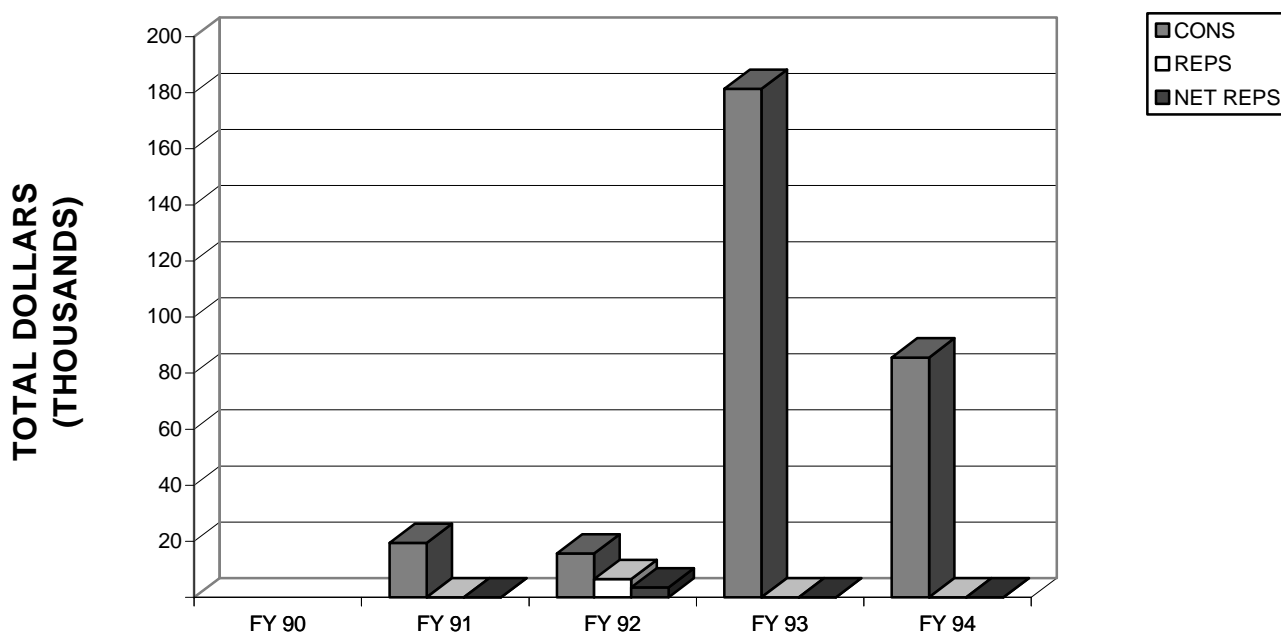
CAT D5

CAT D5 FIVE YEAR TOTAL ARMY CLASS IX COSTS						
FISCAL YEAR	CONS	REPS	NET REPS	NET TOTAL COSTS	NUMBER OF SYSTEMS	AVG PER SYSTEM
FY 90						
FY 91	19,459	0	0	19,459	9	2,162
FY 92	15,684	6,583	3,620	19,304	9	2,145
FY 93	181,394	0	0	181,394	43	4,218
FY 94	85,570	0	0	85,570	46	1,860

The Total Army Class IX costs from the previous pages are broken out by Work Breakdown Structure (WBS) in the following table. The FY 94 WBS Class IX costs for consumables (CONS) and reparables (REPS) are the total cost of requisitions recorded in the Logistic Intelligence File (LIF). The NET REPS are the cost to the customer in the field and are calculated by applying an MSC-specific credit rate at the NSN level. The TOTAL costs are a summation of all the WBS elements displayed in the table. NET TOTAL COSTS are the sum of the costs in CONS and NET REPS. NUMBER OF SYSTEMS is the density recorded in the Continuing Balance System-Expanded (CBS-X). AVG PER SYSTEM costs are calculated by dividing the costs in NET TOTAL COSTS column by the total number of systems in the Army.

| | | | | **CAT D5** | | | |
| | | **FY 94 TOTAL ARMY WORK BREAKDOWN STRUCTURE COSTS** | | | | | |
WBS	NAME	CONS	REPS	NET REPS	NET TOTAL COSTS	NUM OF SYSTEMS	AVG PER SYSTEM
01	HULL/FRAME	21,467	0	0	21,467	46	467
02	SUSPENSION/STEER	331	0	0	331	46	7
03	POWER PACKAGE	52,571	0	0	52,571	46	1,143
04	AUX AUTOMOTIVE	874	0	0	874	46	19
05	TURRET ASSEMBLY	0	0	0	0	0	0
06	FIRE CONTROL	0	0	0	0	0	0
07	ARMAMENT	0	0	0	0	0	0
08	BODY/CAB	0	0	0	0	0	0
09	AUTO LOADING	0	0	0	0	0	0
10	AUTO/REMOTE PILOT	0	0	0	0	0	0
11	NBC EQUIPMENT	0	0	0	0	0	0
12	SPECIAL EQUIPMENT	1,476	0	0	1,476	46	32
13	NAVIGATION	0	0	0	0	0	0
14	COMMUNICATIONS	0	0	0	0	0	0
15	VEH APP SOFTWARE	0	0	0	0	0	0
16	VEH SYS SOFTWARE	0	0	0	0	0	0
17	INT, ASSY, TEST, C/O	0	0	0	0	0	0
18	OTHER	8,851	0	0	8,851	46	192
	TOTAL	85,570	0	0	85,570	46	1,860

The following table displays FY 90-94 Class IX costs by Work Breakdown Structure (WBS) for the Total Army. NET TOTAL COSTS are summation for all the WBS elements displayed on the previous page and are a sum of the costs of CONS and NET REPS. NUMBER OF SYSTEMS is the density recorded in the Continuing Balance System-Expanded (CBS-X). AVG PER SYSTEM costs are calculated by dividing the costs in NET TOTAL COSTS by the total number of systems in the Army for the fiscal year. Blank columns indicate system was not tracked in the OSMIS database during that fiscal year.

CAT D5 FIVE YEAR TOTAL ARMY WORK BREAKDOWN STRUCTURE COSTS						
WBS	NAME	FY 90 NET TOTAL COSTS	FY 91 NET TOTAL COSTS	FY 92 NET TOTAL COSTS	FY 93 NET TOTAL COSTS	FY 94 NET TOTAL COSTS
01	HULL/FRAME		2,597	3,972	37,900	21,467
02	SUSPENSION/STEER		2,609	2,289	1,262	331
03	POWER PACK		3,856	9,908	117,304	52,571
04	AUX AUTOMOTIVE		362	103	1,854	874
05	TURRET ASSEMBLY		0	0	0	0
06	FIRE CONTROL		0	0	0	0
07	ARMAMENT		0	0	0	0
08	BODY/CAB		0	0	0	0
09	AUTO LOADING		0	0	0	0
10	AUTO/REMOTE PILOT		0	0	0	0
11	NBC EQUIPMENT		0	0	0	0
12	SPECIAL EQUIPMENT		0	37	2,035	1,476
13	NAVIGATION		0	0	0	0
14	COMMUNICATIONS		0	0	0	0
15	VEH APP SOFTWARE		0	0	0	0
16	VEH SYS SOFTWARE		0	0	0	0
17	INT, ASSY, TEST, C/O		0	0	0	0
18	OTHER		10,035	2,995	21,039	8,851
	TOTAL		19,459	19,304	181,394	85,570
	NUM OF SYSTEMS		9	9	43	46
	AVG PER SYSTEM		2,162	2,145	4,218	1,860

CAT D5
TOP 40 COST DRIVERS
CLASS IX CONSUMABLES (NON-DLRs)

	NSN	NOMENCLATURE	WBS	MRC	ARI	MATCAT	FY 94 AMDF UNIT PRICE	FY 94 QTY
1.	2920012819385	STARTER,ENGINE,ELEC	03A	F		J2100	973.96	10.94
2.	2920004255932	STARTER,ENGINE,ELEC	03A	F		J2100	1,055.22	9.05
3.	2520001229919	DISK,CLUTCH	03J	Z		J2200	141.76	33.00
4.	4010012845806	WIRE ROPE ASSEMBLY,	18	O		J2100	908.39	4.90
5.	2530013000231	BODY,VALVE	03Q	H		J2200	3,500.60	1.00
6.	2520011630816	CLUTCH ASSEMBLY,FRI	03J	Z		J2200	64.89	53.60
7.	4730011495082	STRAINER ELEMENT,SE	01A	Z		J2200	15.82	212.35
8.	6140012034912	BATTERY,STORAGE	18	Z		Q2200	91.79	36.08
9.	2930011624423	CORE,RADIATOR	03G	F		J2100	901.81	3.53
10.	2930011592910	GUARD ASSEMBLY,RADI	03G	Z		J2200	1,096.36	2.13
11.	2815011619635	OIL PAN	03A	Z		J2200	422.70	4.00
12.	3830012790297	CUTTING EDGE,MOLDBO	12E	Z		J2200	159.75	8.67
13.	2540011762987	SEAT,VEHICULAR	01H	O		J2100	426.76	3.00
14.	2940009103066	FILTER ELEMENT,INTA	03A	Z		J2200	32.25	32.61
15.	2930012552943	PUMP,COOLING SYSTEM	03G	Z		J2200	489.74	2.10
16.	2520001478491	DISK,CLUTCH	03J	Z		J2200	26.76	34.57
17.	5330011648707	SEAL ASSEMBLY	01A	Z		T2200	150.93	6.00
18.	2520010219923	DISC ASSEMBLY,PLANE	03H	Z		J2200	37.00	24.00
19.	3120012827553	BEARING,SLEEVE	01H	Z		T2200	106.19	8.00
20.	5330011619158	GASKET KIT	01A	Z		T2200	211.80	3.00
21.	5330011965624	GASKET AND SEAL SET	01A	Z		T2200	159.34	3.67
22.	2590011619630	BRACE ASSEMBLY,BLAD	01H	Z		J2200	1,098.07	0.53
23.	2590011619656	HORN,ELECTRICAL	01H	Z		J2200	150.82	3.71
24.	3010011505434	DISK,CLUTCH	03J	Z		J2200	48.16	10.53
25.	2930004516070	IMPELLER,FAN,AXIAL	03G	Z		J2200	330.54	1.53
26.	2910011434403	NOZZLE,FUEL INJECTI	03A	Z		J2200	74.98	6.70
27.	5330011850502	GASKET AND SEAL SET	01A	Z		T2200	136.02	3.67
28.	2540011191743	MIRROR HEAD,VEHICUL	01H	Z		J2200	77.16	6.25
29.	2530005450322	BEARING,DIAGONAL BR	03Q	Z		J2200	57.56	8.13
30.	3020011620180	SPROCKET WHEEL SEGM	03H	Z		J2200	25.35	18.00
31.	2520011493802	JOINT ASSEMBLY,AUTO	03L	Z		J2200	73.34	6.15
32.	2590011627550	PISTON,LINEAR ACTUA	01H	Z		J2200	224.93	2.00
33.	2540004497378	CUSHION,SEAT BACK,V	01H	Z		J2200	63.44	6.15
34.	2990004106812	MUFFLER,EXHAUST	03F	Z		J2200	73.72	4.85
35.	5306011697537	BOLT	01A	Z		T2200	27.30	13.00
36.	5930011627313	SWITCH,PUSH	04A	Z		Q2200	32.48	10.69
37.	2530004266110	GUARD	03Q	Z		J2200	480.31	0.70
38.	5340011697536	HOLD DOWN	01A	Z		T2200	81.26	4.00
39.	5340010906880	BRACKET	01A	Z		T2200	159.70	2.00
40.	2510011448615	GRILLE,METAL	01F	Z		J2200	157.96	2.00

NUMBER OF SYSTEMS	46

NOTE: ROWS MAY NOT CALCULATE DUE TO ROUNDING

EXTENDED COST (QTY * UNIT PRICE)	AVERAGE COST PER SYSTEM	AVERAGE QUANTITY PER 100 SYSTEMS	FY 91-94 FOUR YEAR AVERAGE	
			QTY	EXTENDED COST
10,655	231.63	23.7826	3.97	3,867
9,550	207.61	19.6739	2.68	2,828
4,678	101.70	71.7391	11.00	1,559
4,451	96.76	10.6522	4.58	4,160
3,501	76.11	2.1739	0.25	875
3,478	75.61	116.5217	28.40	1,843
3,359	73.02	461.6304	62.81	994
3,312	72.00	78.4348	23.54	2,161
3,183	69.20	7.6739	0.88	794
2,335	50.76	4.6304	0.53	581
1,691	36.76	8.6957	1.00	423
1,385	30.11	18.8478	3.92	626
1,280	27.83	6.5217	1.70	725
1,052	22.87	70.8913	24.27	783
1,028	22.35	4.5652	0.53	260
925	20.11	75.1522	21.94	587
906	19.70	13.0435	7.22	1,090
888	19.30	52.1739	10.00	370
850	18.48	17.3913	4.00	425
635	13.80	6.5217	1.00	212
585	12.72	7.9783	0.92	147
582	12.65	1.1522	0.13	143
560	12.17	8.0652	2.56	386
507	11.02	22.8913	2.63	127
506	11.00	3.3261	1.13	374
502	10.91	14.5652	7.57	568
499	10.85	7.9783	0.92	125
482	10.48	13.5870	2.01	155
468	10.17	17.6739	17.78	1,023
456	9.91	39.1304	13.50	342
451	9.80	13.3696	2.29	168
450	9.78	4.3478	0.50	112
390	8.48	13.3696	2.96	188
358	7.78	10.5435	7.14	526
355	7.72	28.2609	6.25	171
347	7.54	23.2391	5.64	183
336	7.30	1.5217	0.93	447
325	7.07	8.6957	2.75	223
319	6.93	4.3478	1.50	240
316	6.87	4.3478	0.50	79

67,936	79.4%	TOP 40
17,634	20.6%	OTHERS
85,570		

CAT D5
COST DRIVERS
CLASS IX REPARABLES (DLRs)

NSN	NOMENCLATURE	WBS	MRC	ARI	MATCAT	FY 94 AMDF UNIT PRICE		FY 94
						W/O CREDIT	W/CREDIT	QTY

NO DATA

CAT D5
REPARABLES (DLRs)

EXTENDED COST (W/CREDIT) (QTY * UNIT PRICE)	AVERAGE COST (W/CREDIT) PER SYSTEM	AVERAGE QUANTITY PER 100 SYSTEMS	FY 91-94 FOUR YEAR AVERAGE	
			QTY	EXTENDED COST (W/CREDIT)

NO DATA

The following table summarizes FY 94 Depot Maintenance Costs from the Master File Maintenance (MFM). Depot maintenance costs are displayed by cost elements for end item maintenance and secondary item maintenance. The OTHER cost columns represent work categories such as progressive maintenance, renovation, and fabrication/manufacture. For reporting purposes, TRANSPORTATION costs recorded in the World Aircraft Logistics Conference (WALC)/Special Aircraft Assignment Mission (SAAM) records are shown in the OTHER maintenance category.

CAT D5 FY 94 DEPOT MAINTENANCE COSTS							
COST ELEMENTS	END ITEM MAINTENANCE				SECONDARY ITEM MAINTENANCE		
	REPAIR	OVERHAUL	OTHER	MODIFICATION	REPAIR	OVERHAUL	OTHER
CIVILIAN LABOR	0	0	0	0	0	0	0
MILITARY LABOR	0	0	0	0	0	0	0
MATERIEL	0	0	0	0	0	0	0
TRANSPORTATION	0	0	0	0			
OVERHEAD	0	0	0	0	0	0	0
CONTRACT	0	0	0	0	0	0	0
OTHER	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0
QTY COMPLETED	0	0	0	0	0	0	0
AVG COST	0	0	0	0	0	0	0

The table below summarizes FY 94 Intermediate Maintenance Costs from the Work Order Logistics File (WOLF) data. The labor hours and labor costs for Direct Support/General Support Intermediate Maintenance (DS/GS) and Civilian Maintenance are displayed by MACOM and Total Army. MACOM DS/GS LABOR COSTS are calculated by multiplying MACOM labor hours by the Army Manpower Cost System (AMCOS) E-5 composite standard rate ($16.61). CIVILIAN LABOR COSTS are a summation from the source data.

CAT D5 FY 94 INTERMEDIATE MAINTENANCE COSTS					
MACOM	DS/GS LABOR HOURS	DS/GS LABOR COSTS	CIVILIAN LABOR HOURS[*]	CIVILIAN LABOR COSTS[*]	CIVILIAN LABOR COST/HOUR
FORSCOM	213	3,538	2,020	36,655	18.15
USAREUR	0	0			
EUSA	0	0			
USARPAC	0	0			
USARSO	0	0			
USASOC	0	0			
TRADOC	0	0	0	0	0.00
ARNG	0	0			
USAR	0	0			
TOTAL ARMY	213	3,538	2,020	36,655	18.15

*TRADOC LABOR HOURS and LABOR COSTS include contractor hours and costs.

The following table summarizes FY 90-94 Depot Maintenance Costs. The depot maintenance data are recorded in MFM. FY 94 costs are a summation of the cost elements displayed on the previous page. END ITEM OVERHEAD costs were not separately identified prior to FY 92. TRANSPORTATION costs are recorded in the WALC/SAAM records. Blank columns indicate system was not tracked in the OSMIS database during that fiscal year.

CAT D5 FIVE YEAR DEPOT MAINTENANCE COSTS									
COST ELEMENTS	END ITEM MAINTENANCE					SECONDARY ITEM MAINTENANCE			
	FY 90	FY 91	FY 92	FY 93	FY 94	FY 90	FY 91	FY 92	FY 93	FY 94
CIVILIAN LABOR		0	0	0	0		0	0	0	0
MILITARY LABOR		0	0	0	0		0	0	0	0
MATERIEL		0	0	0	0		0	0	0	0
TRANSPORTATION		0	0	0	0					
OVERHEAD		0	0	0	0		0	0	0	0
CONTRACT		0	0	0	0		0	0	0	0
OTHER		0	0	0	0		0	0	0	0
TOTAL		0	0	0	0		0	0	0	0
QTY COMPLETED		0	0	0	0		0	0	0	0
AVG COST		0	0	0	0		0	0	0	0

The table below sumarizes FY 90-94 Intermediate Maintenance Costs from WOLF. The fiscal year total costs for Direct/General Support Intermediate Maintenance (DS/GS) and Civilian Maintenance are displayed by MACOM and Total Army. MACOM DS/GS labor costs are calculated by multiplying MACOM labor hours by the Army Manpower Cost System (AMCOS) E-5 composite standard rate. DS/GS COST PER HR is the E-5 composite standard rate in FY 94 constant dollars. CIVILIAN LABOR COSTS are a summation from the source data. Blank columns indicate system was not tracked in the OSMIS database during that fiscal year.

CAT D5 FIVE YEAR INTERMEDIATE MAINTENANCE COSTS									
MACOM	DIRECT/GENERAL SUPPORT INTERMEDIATE MAINTENANCE (DS/GS)					CIVILIAN MAINTENANCE (CIV)			
	FY 90	FY 91	FY 92	FY 93	FY 94	FY 90	FY 91	FY 92	FY 93	FY 94
FORSCOM		0	893	4,147	3,538		0	106	20,922	36,655
USAREUR		0	0	0	0					
EUSA		0	0	0	0					
USARPAC		0	0	0	0					
USARSO		0	0	0	0					
USASOC		0	0	0	0					
TRADOC		0	0	0	0		0	0	0	0
ARNG		0	0	0	0					
USAR		0	0	0	0					
TOTAL ARMY		0	893	4,147	3,538		0	106	20,922	36,655
LABOR HRS		0	53	241	213		0	7	1,221	2,020
COST PER HR		0.00	16.84	17.19	16.61		0.00	15.14	17.14	18.15

The following list shows the FY 94 Secondary Item - Rebuilds/Overhauls Cost Drivers recorded in the MFM. AVG COST TO REBUILD/OVERHAUL is calculated by dividing the costs in FY 94 TOTAL COST TO REBUILD/OVERHAUL by FY 94 QTY COMPLETED.

			CAT D5 FY 94 DEPOT SECONDARY ITEM MAINTENANCE - REBUILDS/OVERHAULS COST DRIVERS		
NSN	NOMENCLATURE	FY 94 AMDF PRICE	FY 94 TOTAL COST TO REBUILD/ OVERHAUL	FY 94 QTY COMPLETED	AVG COST TO REBUILD/ OVERHAUL
			NO DATA AVAILABLE		

The following list shows the FY 94 Secondary Item Maintenance - Repairs Cost Drivers recorded in MFM. AVG COST TO REPAIR is calculated by dividing the costs in FY 94 TOTAL COST TO REPAIR by FY 94 QTY COMPLETED.

			CAT D5 FY 94 DEPOT SECONDARY ITEM MAINTENANCE - REPAIRS COST DRIVERS		
NSN	NOMENCLATURE	FY 94 AMDF PRICE	FY 94 TOTAL COST TO REPAIR	FY 94 QTY COMPLETED	AVG COST TO REPAIR
			NO DATA AVAILABLE		

The following list shows the FY 90-94 Secondary Item - Rebuild/Overhauls Cost Drivers recorded in MFM. These five year Cost Drivers were revised from previous years' reports, see Appendix A, Section 13 for further explanation. AVG COST TO REBUILD/OVERHAUL is calculated by dividing the costs in FY 90-94 TOTAL COST TO REBUILD/OVERHAUL by FY 90 -94 QTY COMPLETED.

CAT D5 **FIVE YEAR DEPOT SECONDARY ITEM MAINTENANCE - REBUILDS/OVERHAULS COST DRIVERS**					
NSN	NOMENCLATURE	FY 94 AMDF PRICE	FY 90-94 TOTAL COST TO REBUILD/ OVERHAUL	FY 90-94 QTY COMPLETED	AVG COST TO REBUILD/ OVERHAUL
			NO DATA AVAILABLE		

The following list shows the FY 90-94 Secondary Item - Repairs Cost Drivers recorded in MFM. These five year Cost Drivers were revised from previous years' reports, see Appendix A, Section 13 for further explanation. AVG COST TO REPAIR is calculated by dividing the costs in FY 90-94 TOTAL COST TO REPAIR by FY 90-94 QTY COMPLETED.

CAT D5 **FIVE YEAR DEPOT SECONDARY ITEM MAINTENANCE - REPAIRS COST DRIVERS**					
NSN	NOMENCLATURE	FY 94 AMDF PRICE	FY 90-94 TOTAL COST TO REPAIR	FY 90-94 QTY COMPLETED	AVG COST TO REPAIR
			NO DATA AVAILABLE		

CHOOSE A VOLUME FOR MORE SYSTEMS

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